



## MARYLAND Department of Health

### **Public Health Preparedness and Situational Awareness Report: #2019:37**

Reporting for the week ending 09/14/19 (MMWR Week #37)

**September 20th, 2019**

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

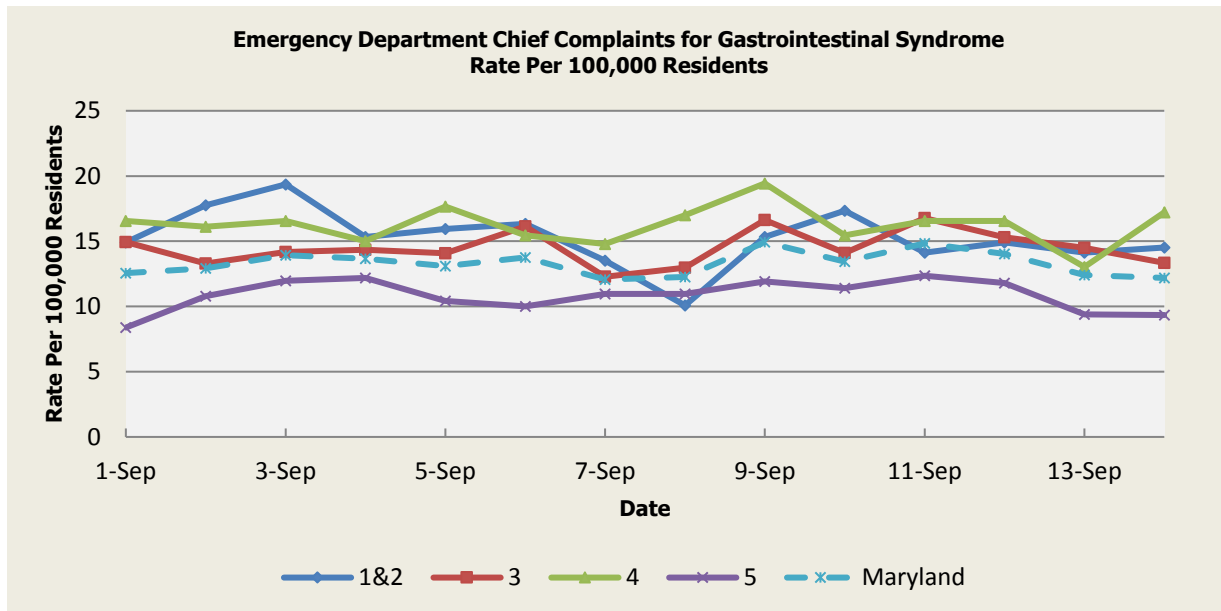
<b>National:</b>	<b>No Active Alerts</b>
<b>Maryland:</b>	<b>Normal (MEMA status)</b>

### **SYNDROMIC SURVEILLANCE REPORTS**

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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## Gastrointestinal Syndrome



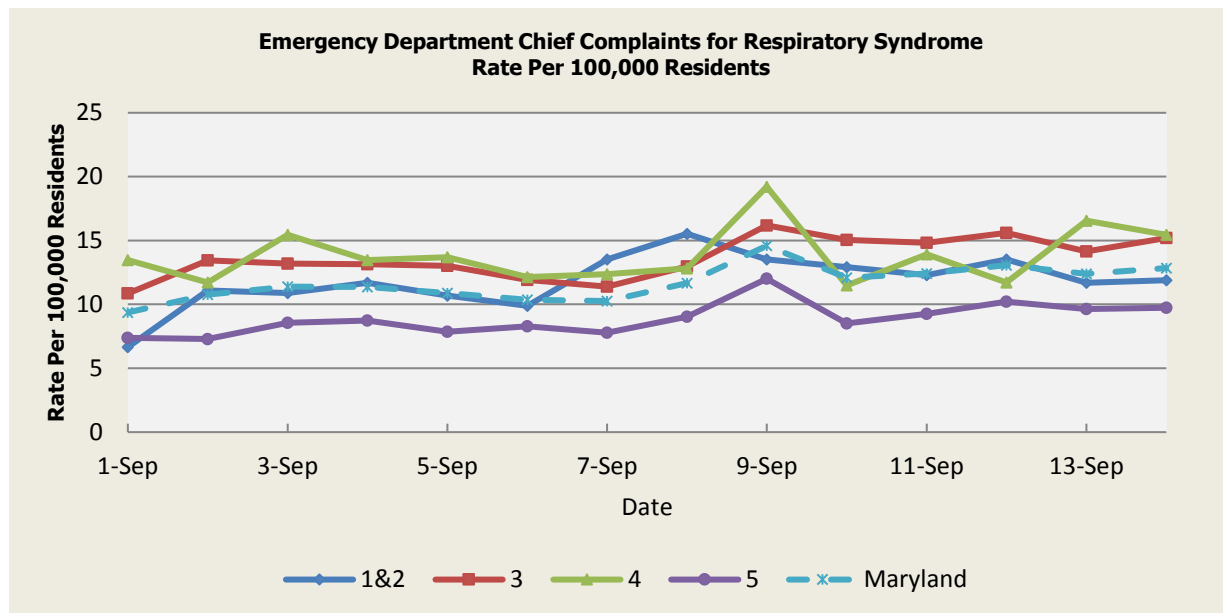
There was one Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Treatment Center (Region 3)

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.29	15.09	15.93	10.25	13.15
Median Rate*	13.11	14.87	15.46	10.17	13.02

*\* Per 100,000 Residents*

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## Respiratory Syndrome



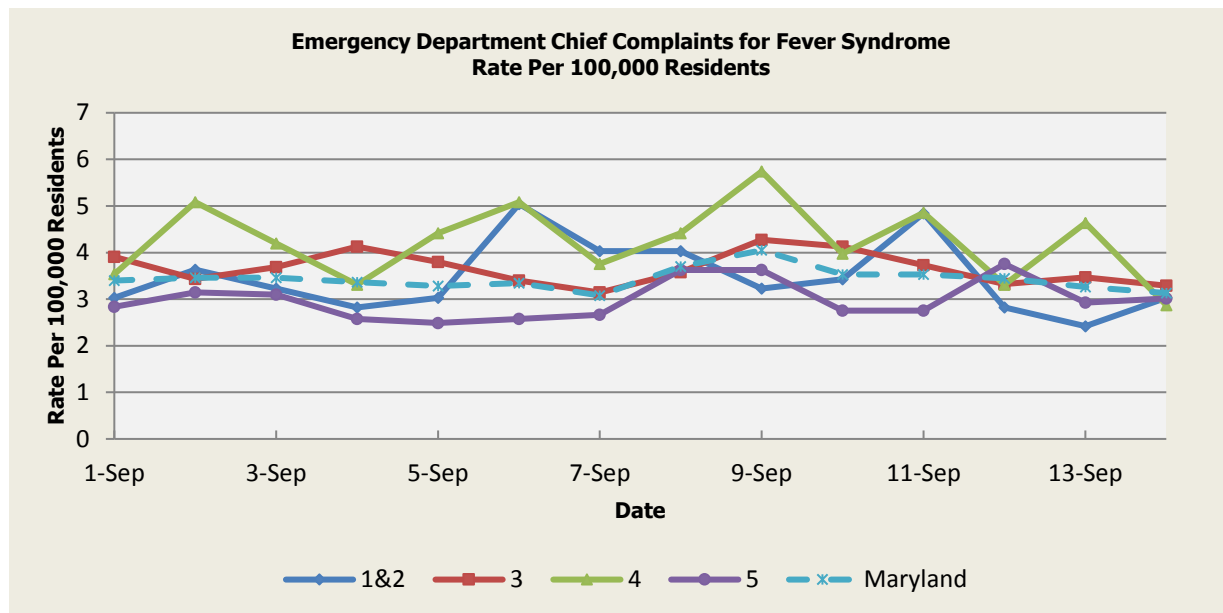
There was one Respiratory Syndrome outbreaks reported this week: one (1) outbreak of ILI associated with a Daycare Center (Region 5)

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.61	14.69	15.03	9.94	12.72
Median Rate*	12.10	14.14	14.35	9.60	12.23

\* Per 100,000 Residents

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## Fever Syndrome



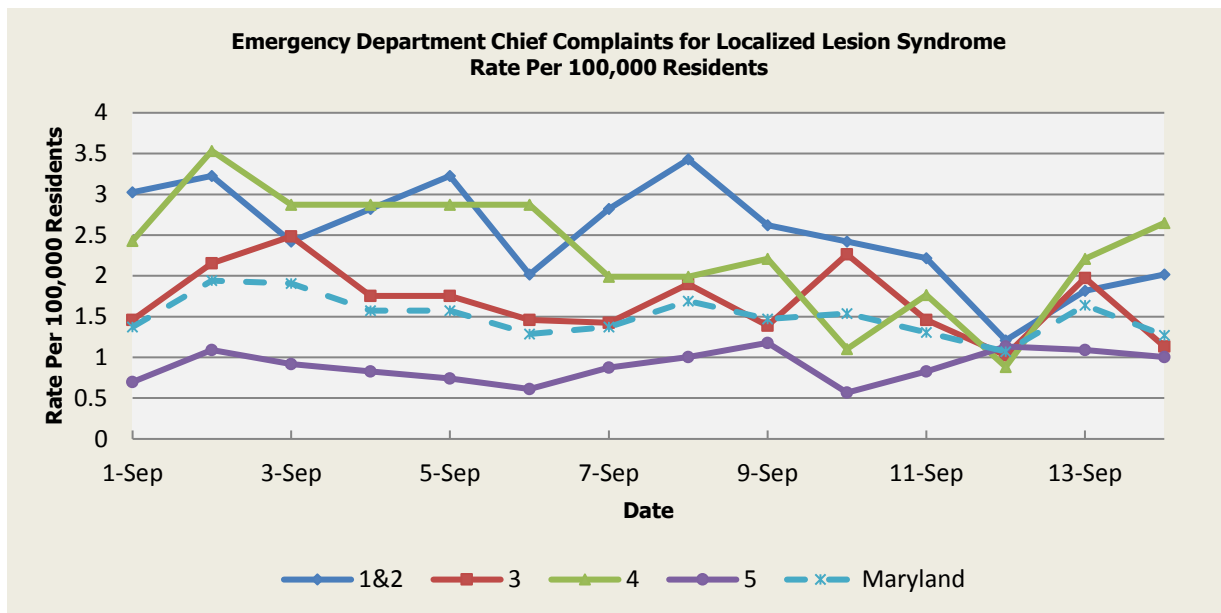
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.08	3.90	4.12	3.04	3.52
Median Rate*	3.02	3.80	3.97	2.92	3.40

*\*Per 100,000 Residents*

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## Localized Lesion Syndrome



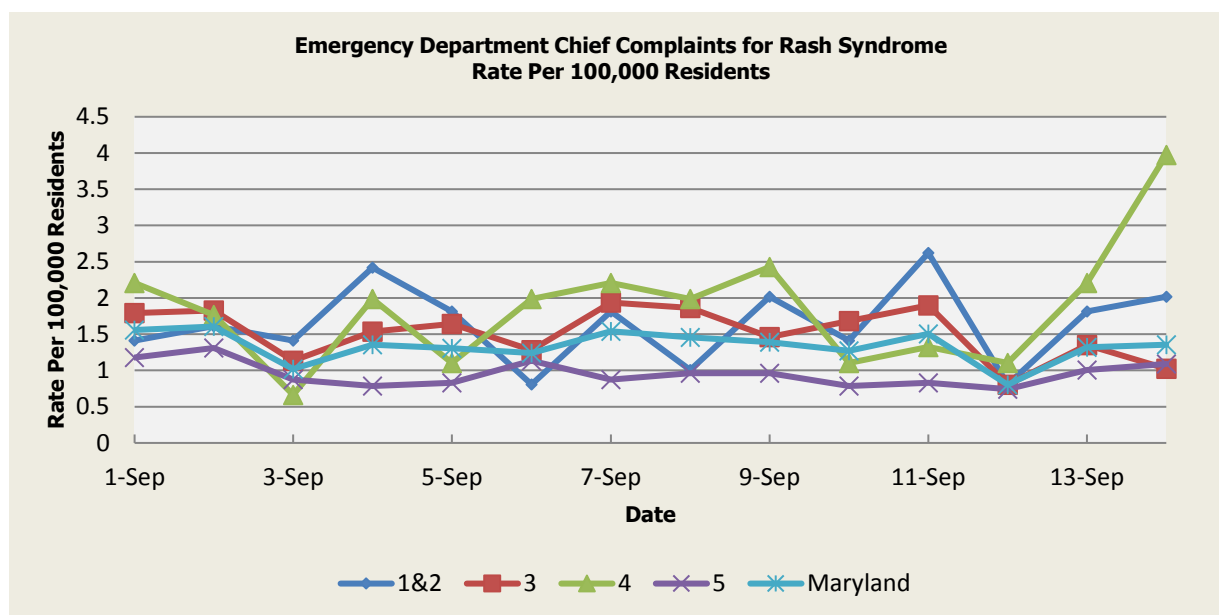
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.15	1.79	2.05	0.91	1.42
Median Rate*	1.01	1.72	1.99	0.87	1.37

\* Per 100,000 Residents

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## Rash Syndrome



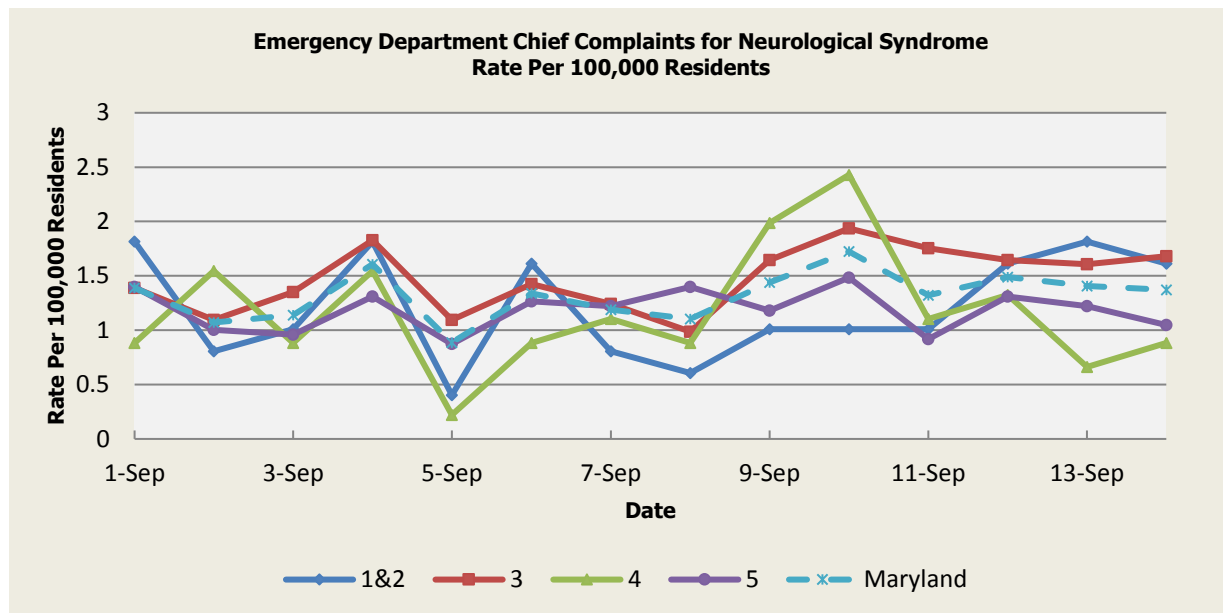
There were two Rash Syndrome outbreaks reported this week: one (1) outbreak of Scabies in an Assisted Living Facility (Region 5), one (1) outbreak of Scabies in Workplaces (Region 5).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.25	1.68	1.77	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.92	1.32

\* Per 100,000 Residents

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## Neurological Syndrome



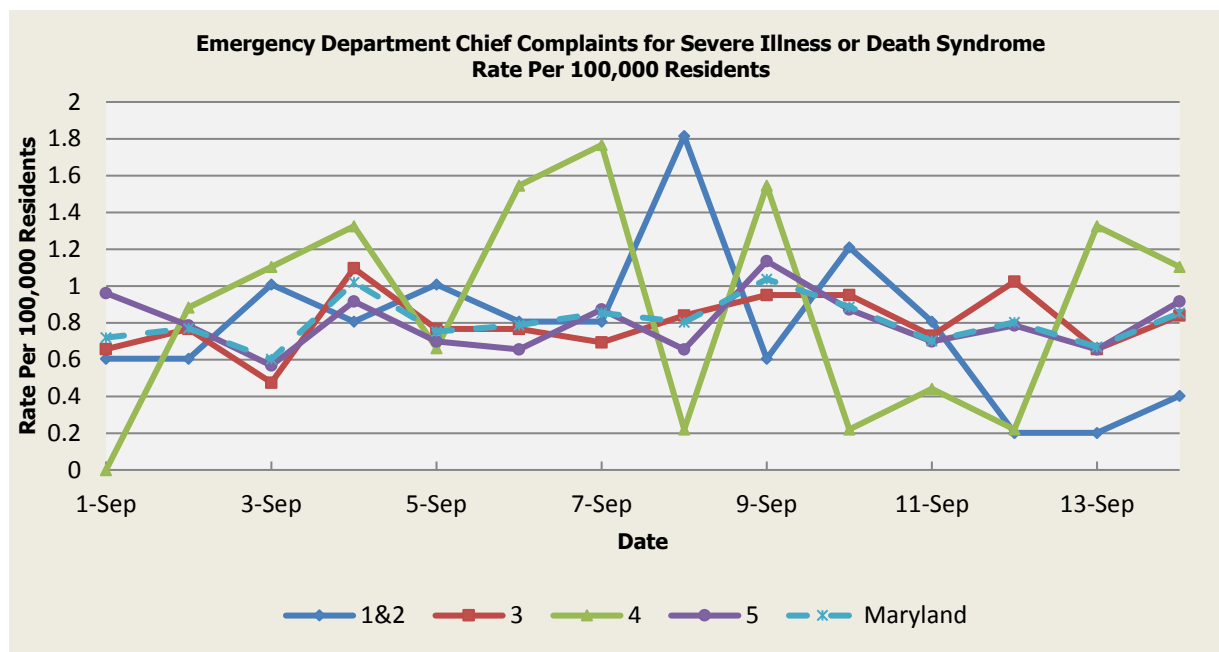
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.78	0.95	0.87	0.61	0.80
Median Rate*	0.81	0.88	0.66	0.57	0.70

\* Per 100,000 Residents

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## Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.52	0.73
Median Rate*	0.60	0.84	0.66	0.48	0.70

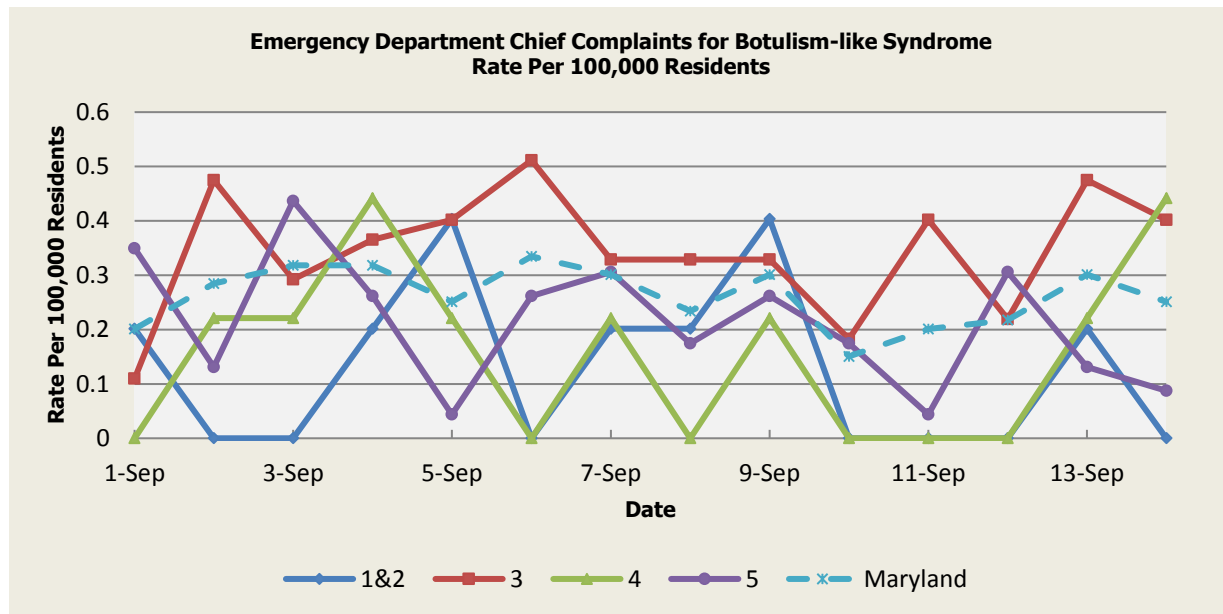
\* Per 100,000 Residents

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## **SYNDROMES RELATED TO CATEGORY A AGENTS**

### **Botulism-like Syndrome**



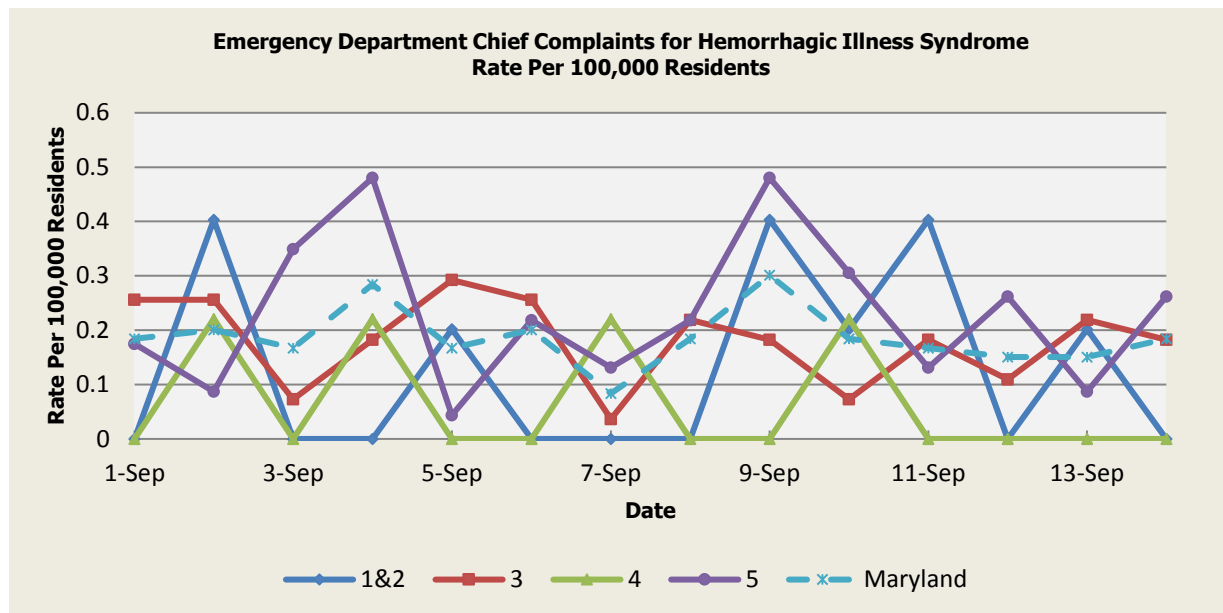
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on, 9/1 (Regions 1&2,5), 9/2 (Regions 3,4), 9/3 (Regions 3,4,5), 9/4 (Regions 1&2,3,4,5), 9/5 (Regions 1&2,3,4), 9/6 (Regions 3,5), 9/7 (Regions 1&2,3,4,5), 9/8 (Regions 1&2,3,5), 9/9 (Regions 1&2, 3,4,5), 9/10 (Region 5), 9/11 (Region 3), 9/12 (Region 4), 9/13 (Regions 1&2, 3,4), 9/14 (Regions 3,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.12	0.06	0.08	0.10
Median Rate*	0.00	0.11	0.00	0.04	0.08

\* Per 100,000 Residents

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## Hemorrhagic Illness Syndrome



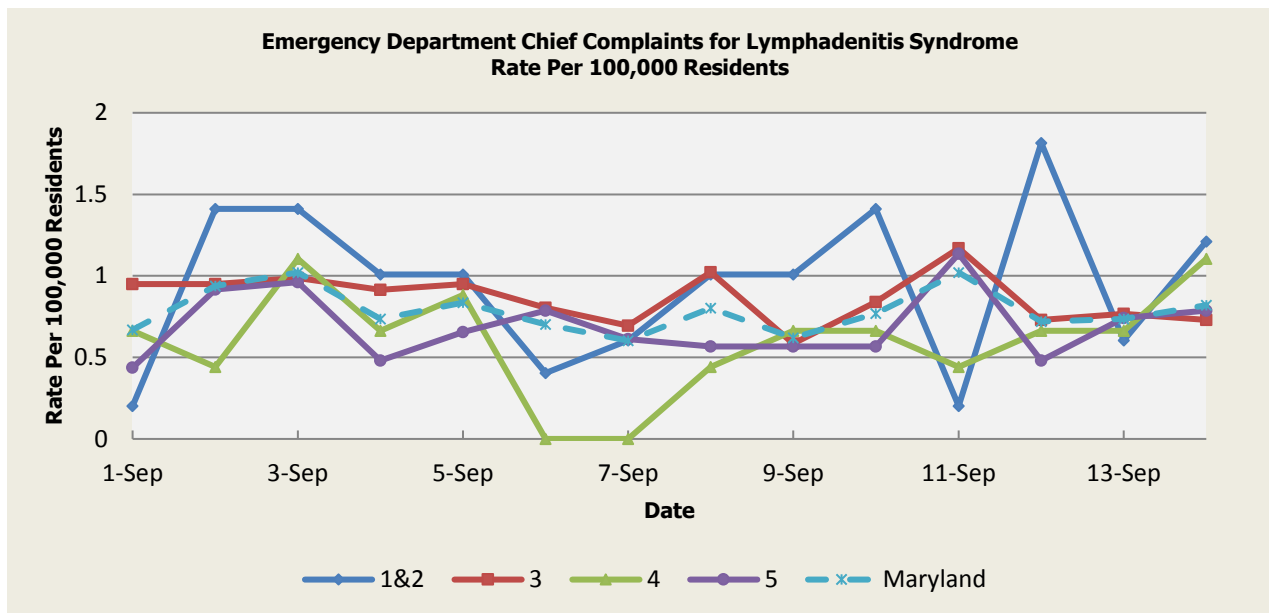
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on, 9/2 (Regions 1&2,4), 9/3 (Region 5), 9/4 (Regions 4,5), 9/5 (Region 1&2), 9/7 (Region 4), 9/9 (Regions 1&2,5), 9/10 (Regions 1&2, 4,5), 9/11 (Region 1&2), 9/12 (Region 5), 9/13 (Region 1&2), 9/14 (Region 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.16	0.04	0.13	0.13
Median Rate*	0.00	0.11	0.00	0.09	0.08

\* Per 100,000 Residents

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## Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on, 9/2 (Regions 1&2,5), 9/3 (Regions 1&2,4,5), 9/4 (Region 1&2), 9/5 (Regions 1&2,4), 9/6 (Region 5), 9/8 (Region 1&2), 9/9 (Region 1&2), 9/10 (Region 1&2), 9/11 (Region 5), 9/12 (Region 1&2), 9/14 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.38	0.59	0.40	0.38	0.48
Median Rate*	0.40	0.51	0.44	0.35	0.44

\* Per 100,000 Residents

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## **MARYLAND REPORTABLE DISEASE SURVEILLANCE**

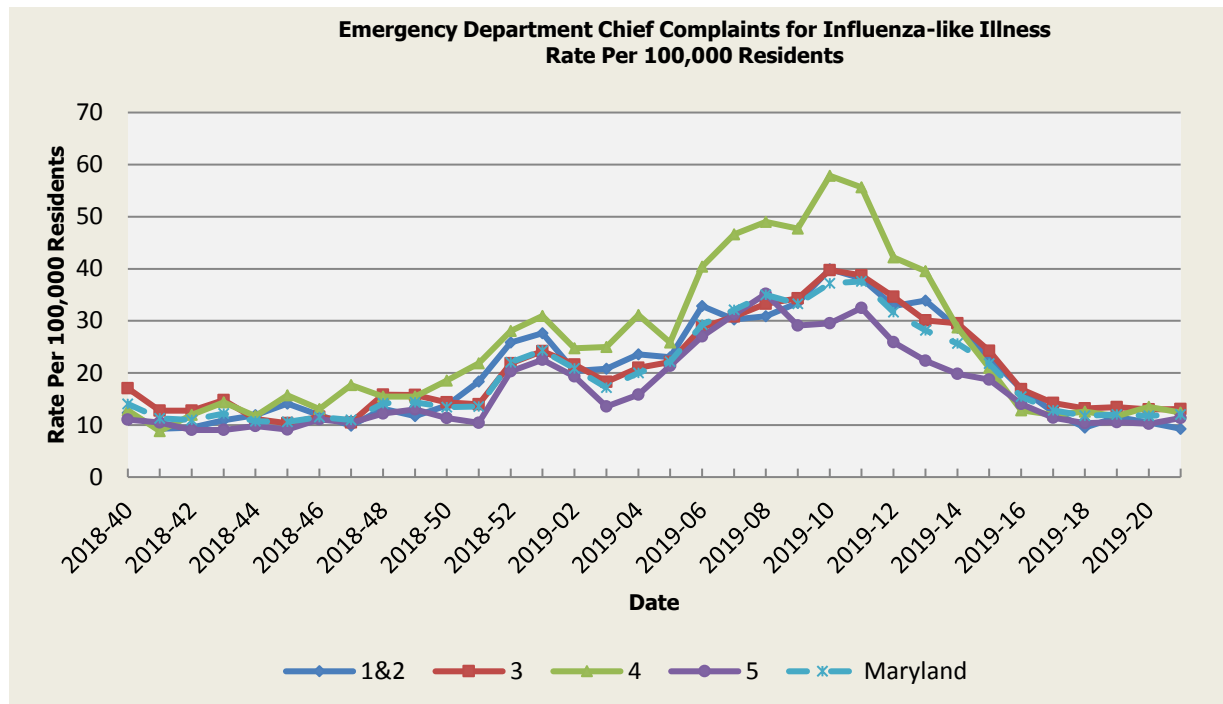
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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## **SYNDROMIC INFLUENZA SURVEILLANCE**

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

### **Influenza-like Illness**

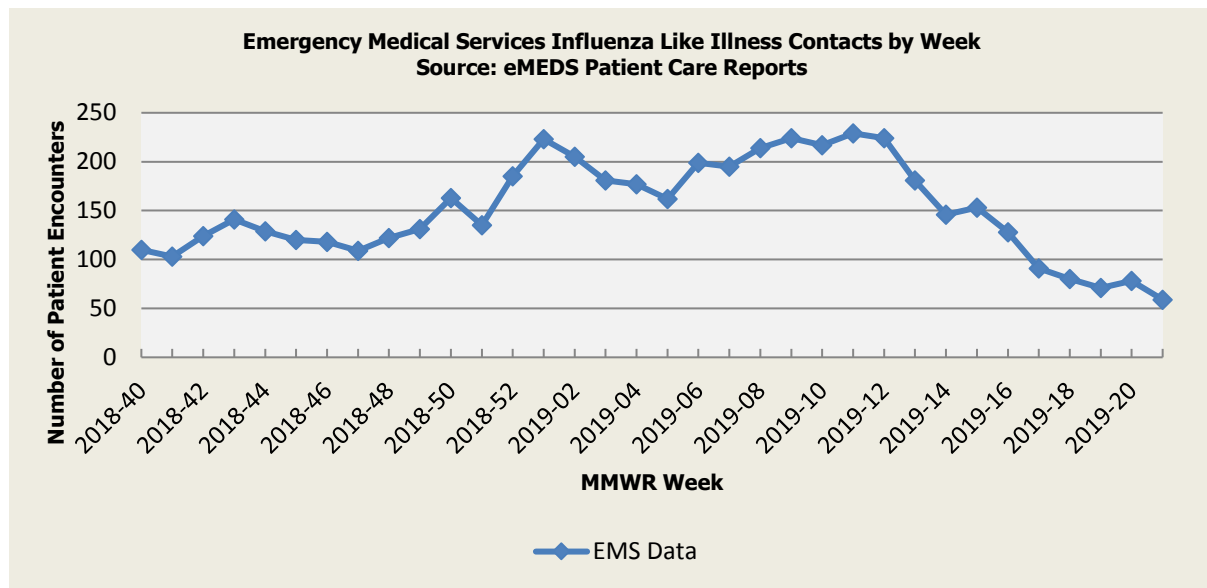


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.20	13.31	12.85	11.28	12.24
Median Rate*	7.66	10.30	9.27	8.77	9.44

\* Per 100,000 Residents

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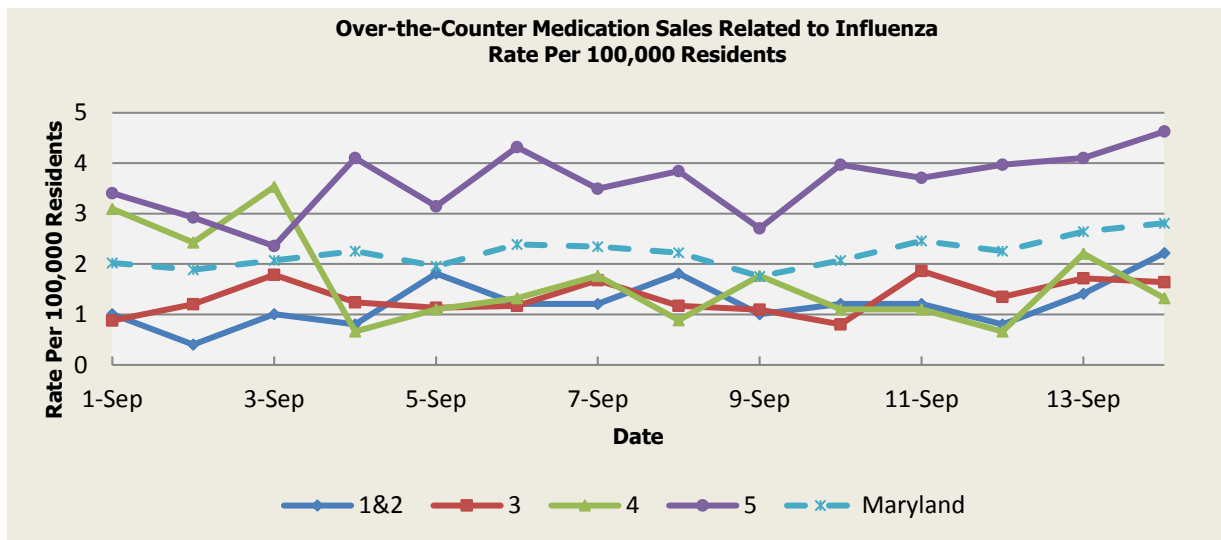
## Influenza-like Illness Contacts by Week



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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## Over-the-Counter Influenza-Related Medication Sales



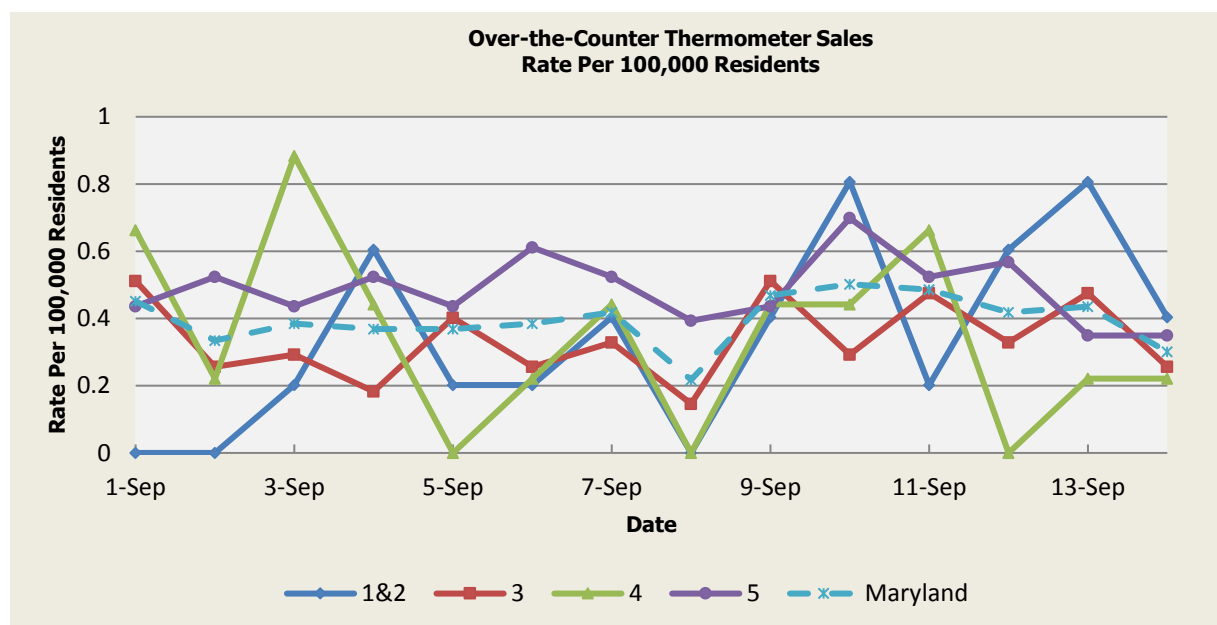
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.47	4.47	2.67	7.82	5.53
Median Rate*	2.82	3.62	2.21	7.12	4.80

\* Per 100,000 Residents

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## Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.95	2.81	2.24	3.74	3.14
Median Rate*	2.62	2.70	2.21	3.67	3.06

\* Per 100,000 Residents

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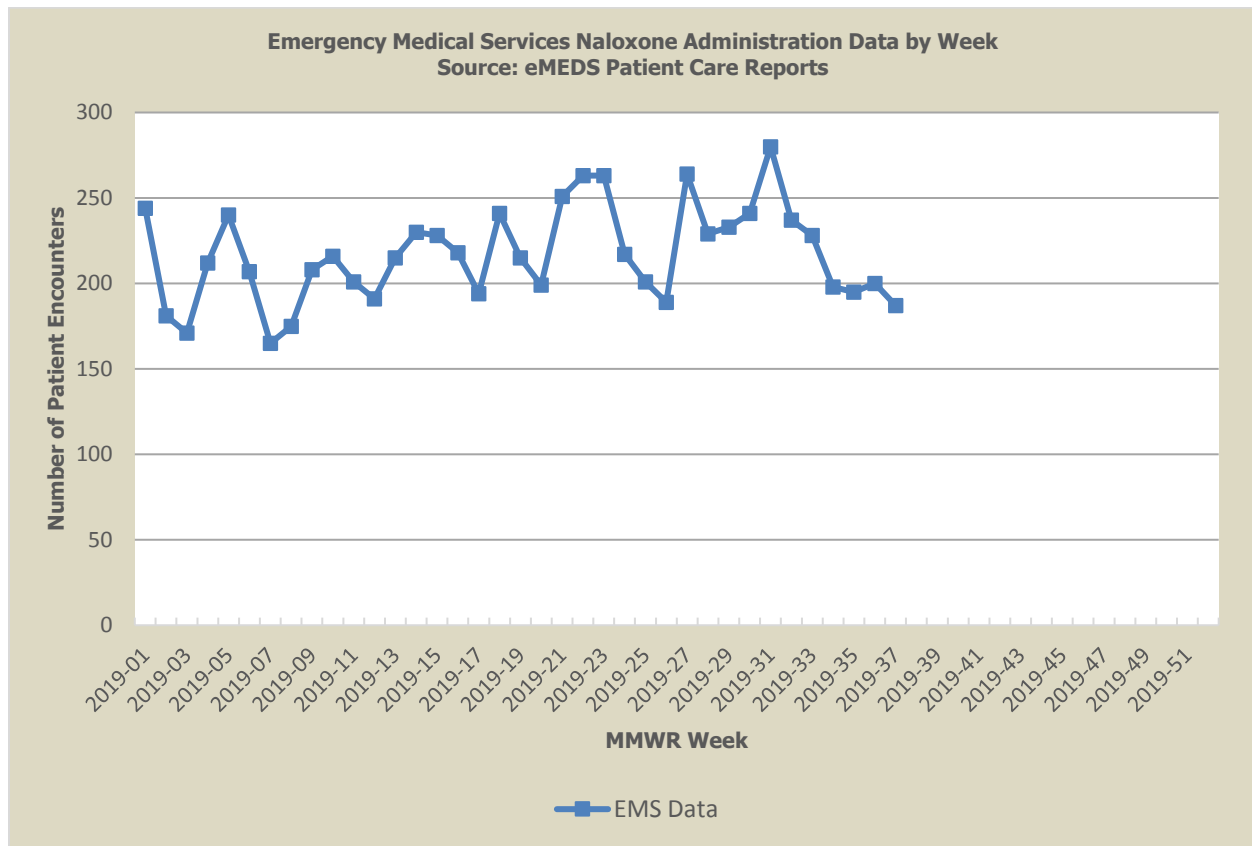
## **SYNDROMIC OVERDOSE SURVEILLANCE**

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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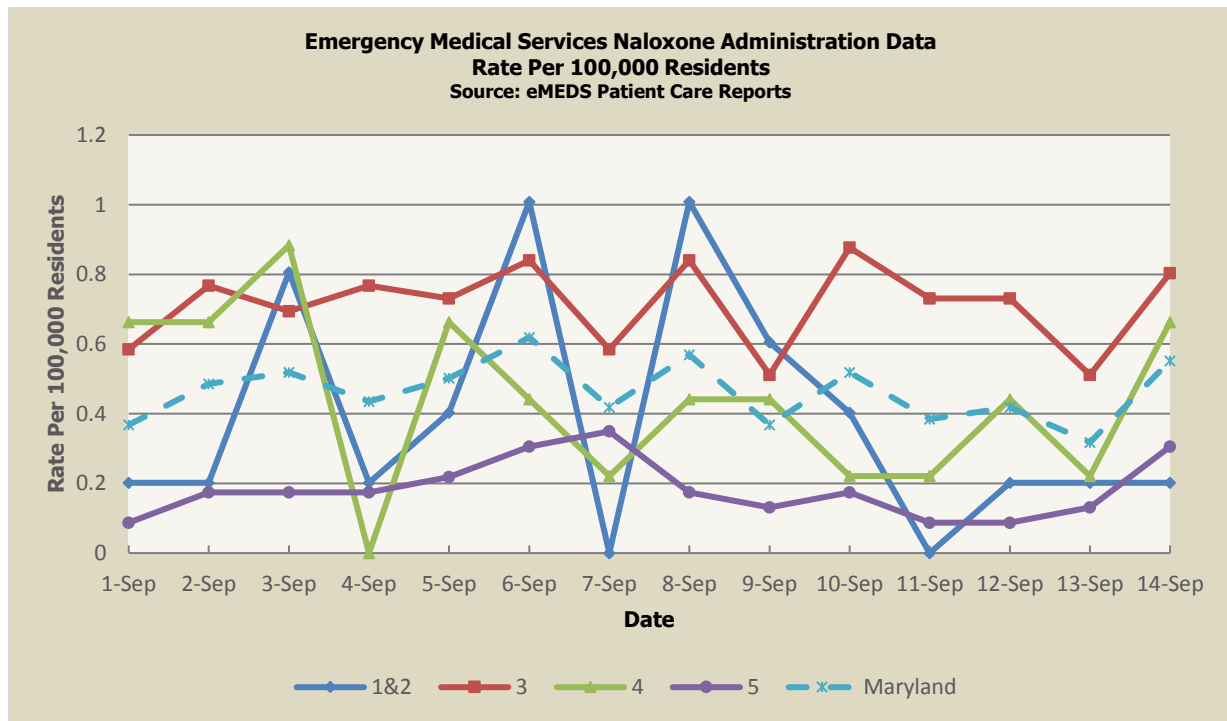
## Naloxone Administration Data by Week



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## Naloxone Administration Data



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of September 19th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA**

*There were no relevant human avian influenza reports this week*

### **HUMAN AVIAN INFLUENZA**

*There were no relevant human avian influenza reports this week*

## **NATIONAL DISEASE REPORTS**

**E. COLI EHEC (MINNESOTA)**, 19 Sept 2019, State health officials reported on [Tue 17 Sep 2019] an E. coli infection outbreak believed to have originated from the Minnesota State Fair. A total of 11 Minnesota residents who attended the Minnesota State Fair have tested positive for E. coli O157, state investigators announced in a news release. Read More: <https://www.promedmail.org/post/6682768>

**VAPING-RELATED ILLNESS (MULTIPLE STATES)**, 19 Sept 2019, The U.S. Centers for Disease Control and Prevention (CDC) said on [Mon 16 Sep 2019] it has activated its emergency operations center to coordinate the investigation into hundreds of cases of severe lung illnesses linked to e-cigarette use. Read More: <https://www.promedmail.org/post/6682101>

**EASTERN EQUINE ENCEPHALITIS (MULTISTATE)**, 18 Sept 2019, The state Department of Public Health is warning that an adult resident of East Lyme has tested positive for eastern equine encephalitis (EEE). This is the 1st human case of EEE identified in Connecticut this season [2019]. Read More: <https://www.promedmail.org/post/6680282>

**LEGIONELLOSIS (ILLINOIS)**, 17 Sept 2019, Public health officials are worried an outbreak of Legionnaires' disease at a suburban Chicago retirement home appears to be spreading with 2 new cases in the nearby community. Read More: <https://www.promedmail.org/post/6679504>

**RABIES (MULTISTATE)**, 17 Sept 2019, A puppy testing positive for rabies on [Thu 29 Aug 2019] has state health departments in the Dakotas seeking individuals possibly exposed to the fatal virus. Read More: <https://www.promedmail.org/post/6678064>

### **INTERNATIONAL DISEASE REPORTS**

**FOODBORNE ILLNESS (BURKINA FASO)**, 18 Sept 2019, At least 18 people died in 10 days after eating pesticide-contaminated food in 2 localities in Burkina Faso. A dozen still remain under observation in hospitals, according to the Minister of Health. Read More: <https://www.promedmail.org/post/6678123>

**TYPHOID FEVER (AUSTRALIA)**, 18 Sept 2019, Doctors have reported the 1st case of extensively drug-resistant typhoid in Australia, warning the country is not immune to the "emerging threat". A 20-month-old Australian-born girl is the 1st patient to develop the highly resistant form of the superbug after returning from a 3-month trip to Pakistan. Read More: <https://www.promedmail.org/post/6679904>

**BOTULISM (FRANCE)**, 18 Sept 2019, In Essonne, a woman was infected by the botulism bacterium after ingesting old soup. A serious neurological disease, botulism develops in the absence of oxygen and most often through vacuum-sealed foods and canned foods. Read More: <https://www.promedmail.org/post/6679903>

**LISTERIOSIS (FRANCE)**, 18 Sept 2019, 7 people in France part of a *Listeria* outbreak linked to organic dairy products fell ill over a period of 18 months, according to public health authorities. Read More: <https://www.promedmail.org/post/6680145>

**ANTHRAX (KAZAKHSTAN)**, 17 Sept 2019, A total of 4 shepherds were hospitalized with anthrax in Zhambyl region, Inform bureau reports. The diagnosis was confirmed by laboratory examination. Patients came to the hospital with eruptions on their bodies. Read More: <https://www.promedmail.org/post/6679284>

**RUBELLA (JAPAN)**, 15 Sept 2019, A new report from Japan's National Institute of Infectious Disease (NIID) indicates the Rubella virus outbreak continues to spread. As of [4 Sep 2019], there have been 2156 Rubella cases reported by the NIID during 2019. Read More: <https://www.promedmail.org/post/6675690>

**AMEBIC MENINGOENCEPHALITIS (PAKISTAN)**, 15 Sept 2019, Officials with the Jinnah Postgraduate Medical Centre (JPMC) report another fatality due to primary amebic meningoencephalitis (PAM) from infection with the brain-eating amoeba, *Naegleria fowleri*. Read More: <https://www.promedmail.org/post/6675511>

**ANTIBIOTIC RESISTANCE (ITALY)**, 14 Sept 2019, A superbug outbreak has been reported in the Italian region of Tuscany. Authorities in Tuscany, home to some of Italy's most visited tourist attractions, have stepped up hospital controls after a deadly outbreak of the New Delhi superbug. Read More: <https://www.promedmail.org/post/6663054>

**JAPANESE ENCEPHALITIS (INDIA)**, 14 Sept 2019, Japanese encephalitis (JE) has killed 154 people in Assam in 2019, the highest in 5 years officials said even as they claimed that the outbreak, which peaked in July and August, was subsiding and only a few fresh cases were reported in September. Read More: <https://www.promedmail.org/post/6673745>

**HUMAN ENTEROVIRUS (TAIWAN)**, 13 Sept 2019, Taiwan's enterovirus cases continued to increase last week, bringing the total number to nearly 20 000 between [1 and 7 Sep 2019], the Centers for Disease Control (CDC) said Tuesday [10 Sep 2019]. Read More: <https://www.promedmail.org/post/6671982>

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website:  
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):  
<http://flusurvey.health.maryland.gov>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A



## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

